Correspondence

Because of the present high cost of producing the Journal, and the great pressure on our space, correspondents are asked to keep their letters short.

Radiology and Lumbar Disks

SIR,—The review in your leading article (*Journal*, December 19, 1953, p. 1363) entitled "Radiology and Lumbar Disks" gives an excellent picture of current attitudes towards the diagnosis of this fashionable complaint. In the same issue under "The Doctors' Diseases" (p. 1372) you report Mr. E. A. J. Heath as saying that in the experience of an insurance company the diagnosis of prolapsed disk was on the increase. He further stated that the condition showed a considerable augmentation of the period of disability when compared with that due to lumbago, sciatica, and sacro-iliac strain in 1937. I could therefore have wished your survey might have extended to assess the results of treatment based on the newer aetiology.

Most clinicians, especially those whose experience stretches back 30 or 40 years, would agree that, up to date, the human race has not benefited as much as might have been hoped from the demonstration of the mechanical cause of several conditions previously incorrectly labelled. I can say that among the Metropolitan Police the period of disability or incapacity from complaints diagnosed or suspected as being due to prolapsed disk conforms to the figures given by Mr. Heath.

If these statements are accepted, they appear to offer a challenge to our current methods of managing the condition. The answers will no doubt vary. I agree that now that the first enthusiasm for operation has passed the selection of cases which justify surgery is slowly finding its level. In the less severe examples without gross neurological signs two factors may be responsible for causing unnecessarily prolonged disability. The first is premature diagnosis. Many practitioners are all too ready to attribute "lumbago" or "fibrositis" of the buttock to prolapsed disk and to inform the patient of this possibility. A hospital assignment is the natural sequence. Often enough I am faced with a policeman who appears to be fit for duty after an attack of lumbago: in accordance with his sensibility to a diagnosis which suggests that there is something radically wrong with his spine he may or may not agree. Frequently, however, he says: "Oh, I have an appointment next week to have an *x*-ray and see a specialist," and, not unreasonably, he thinks he should remain on the sick list. The second factor is the commonly prescribed system of treatment for fairly severe cases. I am inclined to think that prolonged partial immobilization in plaster followed by the provision of a restrictive belt is a too frequent routine. It seems that limited rest, traction, and exercise to restore muscle tone and function are not as generally employed as they might be.

Whatever value may be attached to my suggestions I would submit that we should recognize that, though the aetiology of sciatica and the like may be established, the resultant form of treatment has, up to date, been productive of as much, if not more, harm than good to the community. —I am, etc.,

Faversham, Kent. MAX PAGE.

SIR,—May I be permitted to comment on your leading article, "Radiology and Lumbar Disks" (*Journal*, December 19, 1953, p. 1363)? After careful study I found it difficult to decide whether it contained a plea for the more extensive use of myelography, and concluded that this was probably the case. It seemed to be based upon the need to exclude—or reveal—the presence of a tumour in patients suspected of suffering from a protruded lumbar disk. The incidence of tumours misdiagnosed as protruded disk, according to the quoted figures, was 4.3% at the Lahey Clinic and about 8% at the Mayo Clinic. But these cases were nevertheless dealt with by operation—presumably satisfactorily. Would the writer recommend myelography in every case of suspected lumbar disk protrusion in order to demonstrate pre-operatively tumours in those patients ultimately brought to operation? If that be the case, since the writer makes the statement (and many would agree with it) that "four out of five cases get better when treated conservatively," myelography would be carried out for a condition which occurs in probably not more than 1% of the cases. The statement is made that there is a prejudice against myelography in many centres in Britain, especially amongst orthopaedic surgeons. This is a most fortunate "prejudice" and the use of this word perhaps implies the writer's leaning towards this procedure. He states later that at most neurological centres myelography is held to be an essential investigation; I can hardly credit this, and wonder on what experience he bases such an opinion. And *essential* in which cases?

Finally, he quotes Barr that *catastrophes* can only be avoided by *routine myelography*. Is this closing remark a recommendation? If so, it needs critical examination. What are the catastrophes to be avoided? Those which arise from a lack of careful assessment of the history (so often neglected) and physical signs? A routine investigation—in all patients complaining of posterior crural pain, or of those coming to operation with a carefully considered diagnosis? It would be a retrograde step if, after "twenty years" of experience, those who treated patients were to employ as a routine a procedure which (with present contrast media) is not without danger, is not entirely reliable for the diagnosis of lumbar disk protrusion, and is usually redundant. One had hoped that in this country medicine had now achieved a more critical outlook. Myelography is a valuable method of investigating the spinal canal, and it may be helpful in the investigation of a small proportion of cases of suspected lumbar disk protrusion. The quickest way of bringing it into disrepute is to use it as a routine procedure.—I am, etc.,

London, E.1. D. W. C. NORTHFIELD.

SIR,—Your leading article on radiology and lumbar disks (*Journal*, December 19, 1953, p. 1363) leads me to believe that nobody in Britain has yet seen fit to put on trial the methods described by Hasner, Schalimtzek, and Snorrason.[1] These gentlemen, working at the State Hospital, Copenhagen, have evolved what they call a functional *x*-ray examination of the spine, and, as its name implies, the rationale is to examine the spine radiologically from a functional point of view—namely, in its main positions of flexion, extension, and lateral bending. In the first two positions the films are taken in the lateral view, whilst in the third position they are taken in the antero-posterior view.

When the normal spine bends in whatever direction, the vertebrae angulate on each other, the angles converging to the concavity of the spine. In cases of prolapsing or degenerating disk there is either parallelism of the vertebral bodies or paradoxical angulation—i.e., the angle formed between the two vertebrae converges to the convex side of the spine. In a series of 90 cases these workers were able to demonstrate 86 abnormal disks by their functional *x*-ray examination. Of 13 patients submitted to operation the functional *x*-ray findings were confirmed in 12, whereas straight *x*-ray only revealed 6 cases. In this same series of 13 cases, myelography failed to reveal one case which the functional *x*-ray discovered, and vice versa.

I would have thought that there was sufficient evidence of the merit of this method to warrant its being taken up in this country.—I am, etc.,

Salford, 7. HYMAN DAVIES.

REFERENCE

[1] *Acta radiol. (Stockh.)*, 1952, 37, 141.

SIR,—In your leading article on radiology and lumbar disks (*Journal*, December 19, 1953, p. 1363) you state that an enormous "disk" literature has grown up in the past 20 years and that opinions still differ widely on diagnosis, treatment, and prognosis. However, there is one aspect of